Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NIGEL F. MISSO and STEVE S. ECKERD

Appeal No. 2002-1336
Application No. 09/259,062

ON BRIEF

Before ABRAMS, STAAB, and BAHR, *Administrative Patent Judges*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

Nigel F. Misso and Steve S. Eckerd appeal from the examiner's final rejection of claims 1-4, 6, 8-13, 15 and 17-25, all the claims pending in the application. Subsequently, the examiner withdrew the only rejection of claim 20. Accordingly, only claims 1-4, 6, 8-13, 15, 17-19 and 21-25 remain before us on appeal. An amendment filed subsequent to the final rejection on November 30, 2000 (Paper No. 12) has been entered.

Appellants' invention pertains to a latch for a disc drive, wherein the latch retains the read/write head in the parking zone when the disc drive is non-operational. Independent claims 1 and 10, which appear in the appendix annexed to the main brief, are illustrative of the appealed subject matter.

The references applied in the final rejection are:

Mizoshita et al. (Mizoshita)	5,608,592	Mar. 4, 1997
Rahimi et al. (Rahimi)	5,621,591	Apr. 15, 1997
Reinhart	5,734,527	Mar. 31, 1998
Aruga et al. (Aruga)	5,764,441	Jun. 9, 1998

The following rejections are before us for review:[1]

(a) claims 1-3, 8, 10-12 and 17, rejected under 35 U.S.C. § 102(e), as being anticipated by Reinhart;

(b) claims 4, 6, 9, 13, 15, 18, 19, 21, 23 and 24, rejected under 35 U.S.C. § 103, as being unpatentable over Reinhart in view of Rahimi and Aruga;[2] and

(c) claims 22 and 25, rejected under 35 U.S.C. § 103, as being unpatentable over Reinhart in view of Mizoshita.

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[1]The anticipation rejection of claim 20, and the 35 U.S.C. § 112, second paragraph, rejection of claims 1-4, 6, 8-13, 15 and 17-25 made in the final rejection have been withdrawn. See page 3 of the answer.

[2]The Rahimi and Aruga references were cited against the claims for the first time in the answer in response to appellants' challenge to the examiner's taking of official notice in the rejection of these claims in the final rejection.

Reference is made to appellants' main and reply briefs (Paper Nos. 15 and 17) and to the examiner's final rejection and answer (Paper Nos. 9 and 16) for the respective positions of appellants and the examiner regarding the merits of these rejections.

Discussion

Independent claim 1 is directed to a latch for use in a disc drive, the latch comprising a latch pawl having (with emphasis added):

> a central body portion, rotatable about the latch supporting member, which retains a contact feature of the actuator assembly when the latch pawl is in the latched position, the contact feature moveable along a first plane of travel;
>
> a latch arm which extends from the central body portion;
>
> a support arm which extends from the latch arm *in a direction substantially toward the actuator assembly;* and
>
> a magnetically permeable member *supported by the support arm* to retain the latch pawl in the latched position, wherein the support arm and the magnetically permeable member *extend in a second plane substantially parallel to and displaced from the first plane* so that the contact feature *passes under the support arm as the latch pawl moves between the respective latched and unlatched positions*.

The main issue in this appeal is whether the Reinhart reference, applied by the examiner against claims 1-3, 8, 10-12 and 17, meets the limitations of independent claim 1, and similarly worded limitations found in independent claim 10.

Reinhart discloses a disc drive generally as claimed, including a disc 202 supported by a spindle motor for rotation, an actuator assembly 134 supporting and moving a read/write head 152, and a latch 300 (see Figure 3) for retaining the read/write head in a parking zone 200 when the disc drive is non-operational. Reinhart's latch comprises a latch supporting member 322 and a latch pawl 304 pivotally supported by the latch supporting member. The latch pawl (see, for example, Figures 3, 4A, 4B) includes a central body portion 302 which retains a "contact feature" (i.e., extension 374) of actuator assembly 134 when the latch pawl is in a latching position (Figure 7), and a latch arm 310 extending from the central body portion. The latch arm includes a limit stop 378 for contacting the edge of the lower magnet 320 to properly position the latch pawl in the latching position, and a magnetically permeable member 312 for cooperating with the magnetic field of the vcm assembly 140 to establish a latching force to hold the latch pawl in the latching position.

The examiner finds correspondence between the claimed "support arm" and that part of the latch of Reinhart that is distal of limit stop 378, inclusive of the limit stop (answer, sentence spanning pages 3 and 4). The examiner asserts that Reinhart meets the limitation of claim 1 that the support arm and the magnetically permeable member "extend in a second plane substantially parallel to and displaced from the first plane" because

> The magnetically permeable members of Reinhart '527 are three-dimensional objects. It is a mathematical fact that three-dimensional objects occupy an infinite number of planes substantially parallel to and displaced from any given plane. . . .
>
> . . . Although claim 1 requires that member 312 occupies at least one plane substantially parallel to and displaced from a plane occupied by the contact feature 374, nothing in the claim requires that member 312 and feature 374 occupy no common planes. [Answer, pages 5-6.]

Even if we accept the examiner's assertion in this regard, we cannot accept the examiner's further assertion that Reinhart meets the limitation of claim 1 calling for a support arm which extends from the latch arm "in a direction substantially toward the actuator assembly." While we appreciate that the examiner considers the support arm of Reinhart as corresponding to that part of the latch distal of the limit stop 378 inclusive of the

limit stop, at best, only the limit stop itself, and not the asserted "support arm" as a whole, extends substantially toward the actuator assembly. As we see it, either the support arm of the reference corresponds to the limit stop 378, in which case the support arm extends substantially toward the actuator assembly but does not support the magnetically permeable member as called for elsewhere in the claim, or the support arm of the reference corresponds to the end of the latch distal of the limit stop 378 inclusive of the limit stop, in which case the support arm supports the magnetically permeable member but does not, as a whole, extend substantially toward the actuator assembly. The examiner's view to the contrary is improper.

In addition, there remains the limitation of claim 1 that the "magnetically permeable member [is] supported by the support arm . . . , wherein the support arm and the magnetically permeable member extend . . . so that the contact feature passes under the support arm as the latch pawl moves between the respective latched and unlatched positions." In asserting that this limitation is met by Reinhart, the examiner contends (answer, pages 5 and 6) that there is no claim limitation requiring mechanical clearance between the magnetically permeable member and the contact feature of the actuator assembly.

However, we consider that the claim requirement that the magnetically permeable member is "supported by the support arm," combined with the claim requirement that "the contact feature passes under the support arm as the latch pawl moves between the respective latched and unlatched positions," requires the very "mechanical clearance" between the magnetically permeable member and the contact feature of the actuator assembly that the examiner maintains the claim lacks. In our view, the examiner's position to the contrary amounts to an unreasonable and distorted interpretation of the claim language.[3]

In light of the foregoing, we shall not sustain the rejection of base claims 1 and 10, as well as dependent claims 2, 3, 8, 11, 12 and 17, as being anticipated by Reinhart.

[3]We also note the examiner's comment on page 6 of the answer that, in any event, "it would have been within the level of ordinary skill in the art at the time the invention was made to apply the mechanical clearance of Reinhart '527 member 306 to Reinhart '527 member 312." This comment is of no immediate relevance with respect to the anticipation rejection before us in that any "application" of Reinhart's alleged teaching concerning the location of member 306 of the forward arm 308 to the member 312 of the trailing arm 310 would involve a modification of Reinhart's structure.

The Rahimi and Aruga references additionally applied in the obviousness rejection of claims 4, 6, 9, 13, 15, 18, 19, 21, 23 and 24, and the Mizoshita reference additionally applied in the rejection of claims 22 and 25 have been carefully considered. These references do not make up for the deficiencies of Reinhart discussed above. Accordingly, we also shall not sustain the standing rejections of these claims under 35 U.S.C. § 103.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)	

LJS:hh

CROWE AND DUNLEVY
1800 MID-AMERICA TOWER
20 N. BROADWAY
OKLAHOMA, OK 73102-8273